Knut Grimsrud
8505 SW 184th Loop
Aloha, OR 97007

Home (503) 649-8053
Work (503) 264-8419

DeLorean Owners Association
Regional Chapter 41

February 17, 1997

Happenings

by Knut Grimsrud

We had a modest turnout at the annual planning meeting and election of board (see Chapter Business section later in this issue).

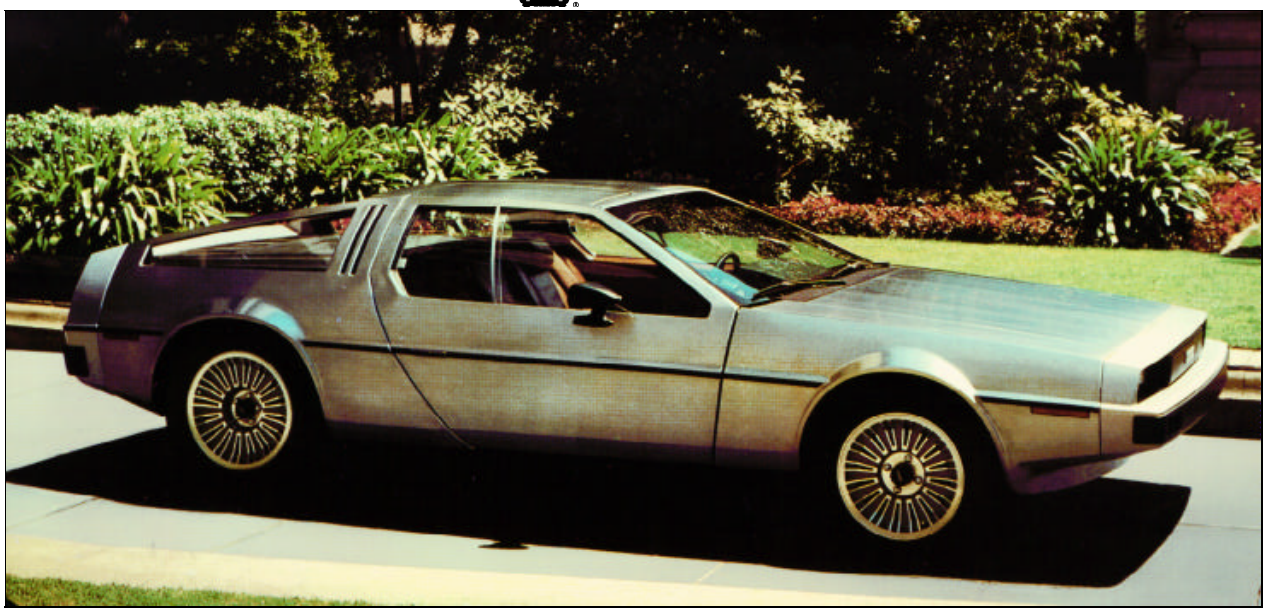
Initially we had problems with the service at Stewart Anderson's Cattle Company being slow to seat us, but once Russ informed the head waiter how important we all were and that he was ready to be seated, the service improved markedly. The management evicted the slower folks at our reserved table and provided large appetizer trays on the house.

We enjoyed our meals and the camaraderie of shared interests and DeLorean related experiences.

Message From Your Coordinator

Chapter 41 is starting a new year with a revitalized board and a long list of newly scheduled events. It is our hope that we cater to the needs of our membership and will be making a renewed effort at meeting your needs. If there are particular areas in which you would like to see Chapter 41 concentrate, please feel free to contact me.

The new year starts amidst renewed concern over the role of local chapters in the DeLorean Owners Association organization by its board of directors. I personally feel that a local organization benefits its members, but would appreciate your views on our role and on how we might better meet your needs.



Postcard of early DeLorean prototype. Notice the differences from its production counterpart such as the lack of rear louver, different wheels, different bumpers, sliding side windows, different side window styling (taller than production counterpart), lack of front air dam, different interior, side view mirrors, etc.

Chapter Business

As part of the last chapter event, the annual chapter business items were covered. By nomination and unanimous vote, the Chapter 41 board now consists of the following officers:

Knut Grimsrud	- Coordinator
Barb Puchy	- Secretary
Knut Grimsrud	- Treasurer
Beaverly Bachand	- Events Director
Chris Myers	- Technical Director
Dave Takeuchi	- Products Director

I wish to thank the enthusiasm and efforts of the volunteer board members and look forward to another year. With the introduction of a new activities director, this year promises to be an interesting one as we revitalize the Chapter 41 events and activities.

Chapter 41 finances are still in good condition despite a relatively slow year, thanks to the support of the chapter members. The following is an accounting of last year's financial transactions:

1996 Starting Balance	$99.20
Expenses	
Postage	$32.32
Income	
Donations	$40.00
1996 Ending Balance	$106.88
Payable	
Knut*	$60.13
Receivable	
DOA**	$30.00
Total Equity	$76.75

*Remaining payable to Knut Grimsrud for reimbursement of DOA membership fees for members signed up with personal credit card in 1995 and postage expenses. Other chapter expenses including office supplies subsidized by Knut.

**Receivable from DOA for new members signed up through Chapter 41 in 1995. After failing to collect the $10 signing bonus over extended period, coordinator ceased signing up local members through Chapter 41 referring prospects instead directly to national DOA office. Financial records documenting new member signups may now be scarce and the estimate is conservative based on known transactions.

My financial planner advises that since Chapter 41 does not meet the required minimums of gross dollar volume of transactions, Chapter 41 is not required to file tax returns.

As you are aware, Chapter 41 does not collect any dues, and therefore operates entirely on unsolicited donations by interested and active members who view Chapter 41 as having value. Thanks to all those whose donations keep the chapter operating.

Front Suspension Restoration Project

To finish up the series on front suspension restoration, I have reproduced the front suspension torque specifications from section J:13:01 of the DeLorean Workshop Manual. If you do not have a workshop manual, one can be obtained from most DeLorean specialty shops.

Front Suspension Torque Specifications

Mounting Area	Torque (Ft./lb)
Brake caliper to mounting bracket	55
Brake disk dustshield	20
Front disk to hub (w/Loctite 601)	20
Spindle to steering knuckle nut	165
Spindle bearing to spindle nut	145
Upper control arm pivot bolt/nut	60
Lower control arm pivot bolt/nut	60
Shock absorber, upper	20
Shock Absorber, lower	60
Stabilizer bar at lower control arm	55
Stabilizer bar pivot (on chassis)	26
Brake hose attaching screw	12
Upper ball joint to steering knuckle	45
Lower ball joint to steering knuckle	45

DMC Historic Documents

In the last issue I included an early memo from John Z. to his investors. This issue's documents include the program schedule John attached with his memo and a stock certificate for 5000 shares of DMC common stock. All dealers were required to purchase a minimum of 5000 shares of DMC stock at a cost of $25,000 in order to sign up as a dealer.

DE LOREAN MOTOR COMPANY
Dealer Program

	JUNE 14	21	28	JULY 5	12	19	26	AUG. 2	9	16	23	30	SEP. 6	13	20	27	OCT. 4	11	18	25	NOV. 1	8	15	22	29	DEC. 6	13	20	27
ORGANIZATION																													
select support group																													
qualify for california office																													
establish california office																													
select western staff																													
establish great lakes and northeast offices and staffs																													
CORPORATE IDENTITY																													
select designer																													
preliminary presentation of symbol, logotype, stationary, signage																													
final presentation																													
DEALER AGREEMENT AND INFORMATION PACKAGE																													
develop "exact substance" of req documents for prospectus																													
legal review and approval																													
develop and print "red herring" prospectus																													
design format and print application for sales agreement																													
sales agreement																													
financial commitment letters																													
dealer requirement booklet																													
dealer agreement package folder																													
PRESENTATION MATERIALS																													
script / storyboard and slide / flip chart																													
review presentation materials with legal staff																													
complete presentation for informational meetings																													
gift item - create and produce																													
produce DMC story film																													
produce signing collateral materials																													
produce brochure																													
running prototypes available																													
SELECT TRADING AREAS																													
western region																													
great lakes region																													
northeast region																													
west central region																													
southeast region																													
DEALER INVITATIONS																													
schedule invitations - informational meetings																													
schedule invitations - signing meetings																													
TRIAL PRESENTATIONS																													
select geographic areas																													
select dealers																													
make presentations - western region																													
evaluate test results																													
INFORMATIONAL MEETINGS																													
all materials in place - schedule locations and facilities																													
finalize meeting program																													
informational meetings - implementation																													
PUBLIC RELATIONS																													
develop press kit																													
implement trade press programs																													
send newsletters																													
release local dealer signings																													
DEALER SIGNING MEETINGS																													
schedule locations																													
make arrangements/send invitations																													
conduct meetings																													

Tech Notes

by Knut Grimsrud

In the previous issues I covered some front end suspension maintenance experiences I had. After the success (and enjoyment) of restoring my front suspension, I have decided to conduct some maintenance on the rear suspension as well. I have just started this work and have not made sufficient progress to start writing about my experiences, so this issue will cover something completely unrelated for a change. As always, please note that I am only conveying my experiences and will in no way be liable for your dropping your DMC on yourself, having your wheels fall off, or having your electronics catch fire.

Infamous Fan Fail

The PRV6 engine is sensitive to overheating, and the cooling system of your engine is quite fickle. So concerned were the engineers of the DMC-12 of the potential to damaging the engine due to overheating that they added a fan-fail warning module to warn you in the event the critical cooling fans failed. Unfortunately, the fan-fail module had a much higher failure rate than the fans which they were designed to sense, and made the system less reliable than before – hence the infamous wire jumper workaround for the fan-fail module

The fused wire link jumper for the fan-fail module was a short-term workaround for the fragile fan-fail module, and was not intended as the final solution. There are much better solutions available today than the wire jumper. I personally use the FanZilla module from P.J. Grady which I am very pleased with. Darryl at Specialty Automotive has another solution that is also said to be very good, although I have no firsthand experience with it.

The FanZilla module provides a couple desired features to the cooling fan circuit. First, it "soft-starts" the fans, one at a time. Instead of engaging both high-power fans with the click of a relay, the power to each fan is engaged more slowly. Also the fans are engaged in sequence in order to minimize the inrush current. If you have ever noticed the little nudge your car takes on a hot afternoon with the A/C on as the cooling fans cycle on and off, you know how this sudden activation of your cooling fans (and A/C compressor) can affect the driveability of your car. Imagine what it does to the electrical system. On my car, the current surge in starting the cooling fans would often cause my cruise control to disengage as the current spike would cause system voltage to drop momentarily. Other sensitive systems are likely also similarly affected.

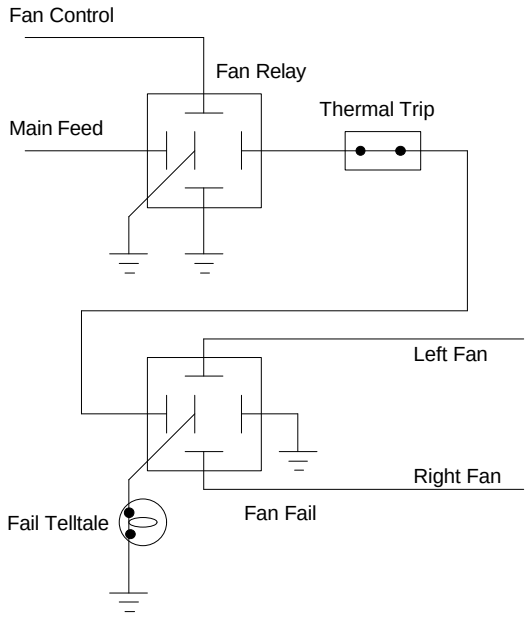
An examination of the various failures I have had with my cooling system, have led to a slight modification of the fan-fail warning telltale to cover the more frequent cooling system failures. Cooling failures I have experienced or have witnessed include the following:

- Low coolant level causing water pump to vapor lock.
- Poorly bled cooling system causing water pump to vapor lock.
- Leaking cooling system causing water pump to vapor lock.
- Failed water pump.
- Failed thermal switch in the coolant pipe.
- Thermal breaker failed or cycling.
- Blown fuse.

I have never encountered a cooling fan that has actually failed before, although I'm sure the fans also fail on occasion. Because of the nature of most common problems, detecting and reporting the myriad of potential problems that can result in your car not receiving proper cooling is difficult.

Rather than attempting to detect cooling failures, I have devised a simple electrical modification that allows to you readily tell when your cooling system is working – instead of detecting when the system fails, the modification reports when the system is functioning.

The following figure is a simple diagram of the fan control electrical circuit. Typically, the fan fail module is removed and a jumper connecting the fan motors to the feed (through the thermal trip) is in its place (unless you have a non-jumper solution like the FanZilla).



The fan-fail socket (and module if not already removed) is in the electronics bay in the parcel shelf behind the passenger seat. The fan-fail socket is the leftmost socket on the front row.

If you have the jumper connecting the two fan feeds to the main feed, modifying the system to make use of the telltale is simple. Connect a wire jumper from any of the three jumpered connections to the center connection of the socket. If your jumper is fused, you should connect the telltale center terminal to the fused end of the link in order to have the telltale circuit also be fuse protected.

With this simple modification, your FAN FAIL telltale will light whenever your cooling fans engage. The FAN FAIL signal should now be treated as a FAN ENGAGED signal instead of a failure notification. If you monitor your temperature gauge carefully (which I encourage anyone driving a DMC to do), you know that the fans should engage one needle width above the 160 degree mark of the temperature gauge. Should you notice that the temperature creeps up but the fans are not engaging per the telltale, you know something is wrong.

The indication can be modified in order to avoid confusion by masking off the FAIL designation (so that the indication merely reads FAN instead of FAN FAIL). If you are not concerned about reversibility and feel comfortable making such modifications, you can take the indicator panel out and use a little black paint on a small brush to mask off the FAIL markings from the backside of the panel. The panel readily comes out by pulling the knobs off the fan, temperature, and mode switches and unscrewing the single small philips screw in the center of the panel.

When jumpering signals, it is a good precaution to feed the signals through a diode in order to avoid the potential for having stray signals feed backwards through your electrical system. Instead of using a simple wire jumper for connecting the fan telltale, use a jumper with a diode inline with it. Since a diode will only allow current to flow in one direction, take care to orient the diode correctly to allow the fan telltale to be energized. Also, since diodes decrease the available voltage at their output by about 1 volt from that at their input, using a diode will dim the telltale slightly preventing your center console from heating so much (the voltage drop induced by diodes vary with diode type and manufacturer. Many multi-testers allow you to measure the forward voltage drop of diodes.). Chain a couple diodes together to dim the light further should you be concerned about the effect the indicator has on the temperature of your center console area.

If your car is equipped with a FanZilla or similar module, the modification is not as simple since the fan-fail socket in the electronics bay is occupied. Also, these modules may include the fan-fail circuitry that allows them to drive the telltale. Having the module and your bypass both drive the telltale can yield unpredictable results and you should avoid making modifications to such systems.

Chapter 41 Events Calendar for 1997

With the election this year of a new events coordinator, Chapter 41 is poised for a fun-filled and informative year of DeLorean related events and activities. To better inform you of the upcoming activities, Beaverly and I have composed an initial events calendar for 1997. Some items have yet to be finalized and some details are still to be worked out. As a reminder, upcoming events will still be highlighted with each newsletter publication.

Saturday, March 15	Irish St. Patrick's Day Festival sponsored by Kell's Irish Restaurant & Pub. This is our only yearly promotional event and we always get a good reception.
Saturday, April 19	Spring tech session sponsored by Foreign Car Specialists. Get you car in shape for summer with the diagnostic help of our technical director.
Sunday, May 18	Spring wildflower rally to St. Helens visitor center.
Saturday, June 21	Tech session & pressure wash. Meet the Pacific Northwest DeLorean Club in Olympia, WA.
Sunday, July 6	Tour of Heirloom Roses rose display gardens outside Newberg.
Saturday, July 26	Rally down Highway 53 to Nehalem for antiques, art, & jewelry shopping and a riverside BBQ.
Saturday, Aug. 30	All British Field Meet at Portland International Raceway.
Sunday, Aug. 31	All British Field Meet swap meet & slalom race at Portland International Raceway.
Sunday, Oct. 19	Regional winery tour. Stock up for the holidays while touring the region's wineries.

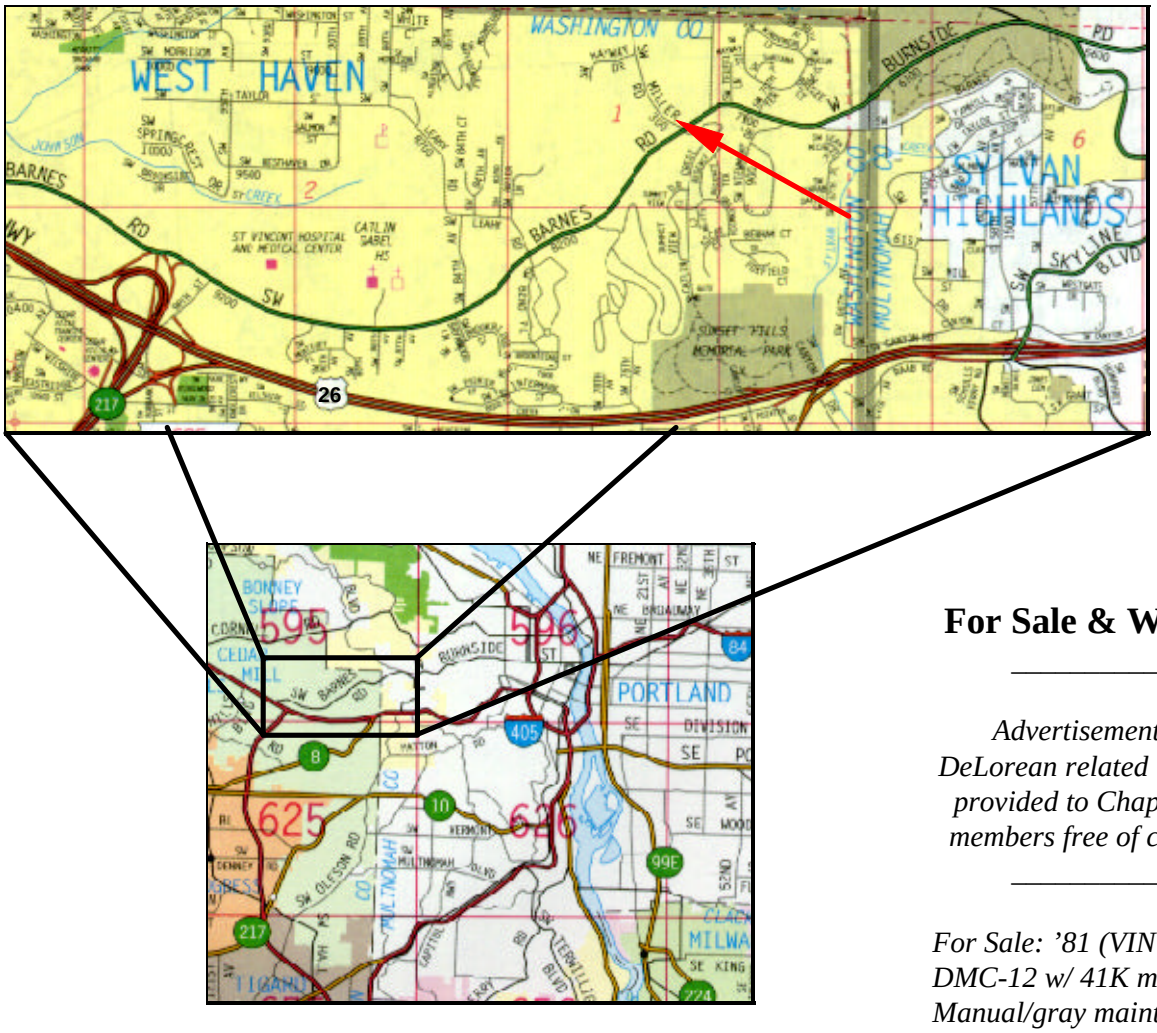
As a courtesy, please RSVP in a timely manner for events you plan on attending.

Kell's Irish St. Patrick's Day Festival

Date: Saturday March 15, 9:00 am
Barnes Village, SW Barnes & Miller (see attached map)
Portland

This is the only promotional event Chapter 41 does each year. Kell's waives our display space rental fees and we have free access to Kell's events. We always have an excellent reception and the curiosity of the festival crowd always leads to some interesting anecdotes. If there is adequate representation this year, I will contact the motor sport writer for the Oregonian for additional coverage.

Since the streets are usually blocked off, we will gather at the shopping center at the corner of SW Barnes and Miller and drive downtown together. The caravan will leave the shopping center at 9:15am, although I will be there a little earlier to detail my car. Brunch will be my treat when we get downtown.



For Sale & Wanted

Advertisement of DeLorean related items is provided to Chapter 41 members free of charge.

For Sale: '81 (VIN 4514) DMC-12 w/ 41K miles. Manual/gray maintained by car collector. $15000

Contact Tom H:631-8898

Wanted: Performance components for PRV6 ground-up rebuild.

Contact Knut H:649-8053 W:264-8419

Wanted: DeLorean with damaged or missing engine for project car.

Contact Knut H:649-8053 W:264-8419
